Supporting Information

Photoluminescence, chemiluminescence and anodic electrochemiluminescence of hydrazide-modified graphene quantum dots

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Fig. S1 AFM images of SGQDs (a) and HM-SGQDs (b). The insets below (a) and (b) are the corresponding height profile along the red lines.
Fig. S2 FT-IR spectra obtained for SGQDs (blue curve) HM-SGQDs (red curve).

Fig. S3 UV-vis absorption and PL emission spectra (recorded for progressively increasing excitation wavelengths in 20 nm increments) of R-SGQDs
**Fig. S4** ECL responses of 40 μg/mL SGQD, R-SGQDs, HM-SGQDs in pH 7 PBS in the presence of 1 mM K$_2$S$_2$O$_8$. Inset: ECL spectra of SGQD/K$_2$S$_2$O$_8$ and R-SGQD/K$_2$S$_2$O$_8$ systems.

**Fig. S5** ECL responses of 40 μg/mL HM-SGQDs in air-saturated PBS of various pH values.